PROJECT TITLE

I-80 WB HOV Lane Gap Closure (EA 263701)

2002 IIP Request: \$17.8 Million RIP Request: \$5 M



Contra Costa County **Project Location:**

Co/Rte/ PM: CC/80/PM9.8 - 12.9

Project Description: Construct westbound HOV lane on I-80 from

Cummings Skyway to existing HOV lane at Route 80/4 Separation. Reconstruct new overcrossing for

California St.

Project Scope: Construct HOV lanes:

reconstruct California St. O.C.; Install ramp metering equipment; ramp improvements; construct retaining wall

Engineer's Estimate: \$18,166,000

Existing Funding: \$3.984M RIP ΠP \$14.182 M

* Feb 2004 CTC fund vote placed project on the pending list for STIP funds.

Project Schedule:

 PA&ED 6/26/03 (Completed) PS&E 9/22/03 (Completed)

PROJECT INFORMATION

Background and Introduction:

I-80 is a critical east-west connector between the San Francisco Bay Region, Sacramento and points east into the Sierras and beyond. I-80 is not only integral to maintain commerce through the region, but it is a vital corridor to the traveling and commuting public as well. The segment addressed by this document, passing through Contra Costa County was completed in 1959 and is designated as a Gateway (IRRS high emphasis route). It is currently a 6 lane access controlled facility with a 3.6m median divided by concrete barrier and paved outside shoulder varying from 2.4 to 2.8 meters. The portion of I-80 west of the limits of this segment has an 8 lane access controlled layout, a 1.8m median divided by concrete barrier and an outside shoulder approaching 3.0m. The portion east of the project limits has a median HOV lane in an 8-lane access controlled layout with a 3.6m median divided by concrete barrier and an outside shoulder that approaches 3.0m.

The 1985 Route Concept Report (RCR) prepared by District 4, recommended a 12 to 14lane facility to accommodate the projected traffic volumes in 2005. The RCR forecasted the Level of Service (LOS) for that segment would be "F" (forced traffic flow, stop and go traffic with high densities less than 25 mph). With the passage of Regional Measure 1 in 1988, voters agreed to fund various congestion relief projects

throughout the region. The 1998 District Management Plan recommended a strategy of HOV lanes coupled with express buses to improve the efficiency of this corridor. Contra Costa County supports the plan and has listed it in their I-80 Corridor Management Plan dated July 1998. The "Interstate 80 Corridor Study" prepared by MTC, dated November 1996, and the Caltrans' "HOV Report" dated March 1998, both recommended that HOV lanes be constructed on this segment of the I-80 corridor.

The MTC prepared the 1996 Interstate 80 Corridor Study to recommend an investment plan to relieve congestion in the I-80 corridor. The study proposed a commuter bus network operating at high speeds on a continuous HOV lane between the Bay Bridge and Carquinez Bridge. The study concluded that the number of trips in this corridor would continue to increase due to long distance commuting from the suburbs to the urban core. A plan was needed to enhance the overall corridor mobility while protecting local streets and roads from traffic overload. This solution was considered cost effective since it would provide congestion relief by offering HOV users a travel advantage in terms of faster travel times and lower travel costs.

During the development of the "I-80 Reconstruction Project" Caltrans, MTC and I-80 corridor cities worked together to develop a set of performance requirements that ultimately became the "I-80 Project Assurances". These assurances outlined how this partnership would coordinate and plan future investment strategies. As a result, the I-80 HOV/Transit Productivity Committee was formed. This committee had representatives from every city along the I-80 corridor, transit and ridesharing agencies, CHP, MTC and Caltrans. The committee's goal was to monitor, market, and ensure effective operations of the I-80 HOV lanes. This project is in accordance with the Project Assurances.

Knowing this, Caltrans produced a PSR-EO in 1999 paving the way for design to begin work on this project.

Project Need:

With the anticipated growth in both commuter and commercial traffic along this portion of the I-80 corridor in Contra Costa County, it is expected that operational performance will only continue to decline in the years to come. Currently in the corridor, travel delay due to peak queues averages 4.8 minutes through the project limits. This number is only expected to increase with the everexpanding population of the regions suburban areas continuing to travel to jobs centered in urban cores surrounding this project and the I-80 corridor. The forecasts and characteristics of this growth pattern almost assure increased congestion and prolonged travel times will be a certain result as time progresses.

Project Purpose:

A basic strategy of adding lanes to accommodate this forecasted delay (the ultimate width as outlined by the Route Concept Report is 12-14 lanes) is neither economically nor physically feasible through the densely developed area surrounding I-80 in this region. In addition, after further study it was found that simply adding mixed-flow lanes to each direction would not improve congestion. A number of projects already completed and or planned for the region, center around promoting ridesharing and transit as the means of reducing the number of vehicles and improving the performance on this portion of the I-80 corridor. Knowing this, the cost effective solution would be to move forward with the completion of the continuous HOV lane on I-80 between the Carquinez Bridge and the San Francisco/Oakland Bay Bridges. Adding this HOV lane in each direction would increase the personcarrying capability and reduce person delay along this corridor. It would also provide additional

time savings for HOV's, which would provide greater incentive for HOV and transit usage. This theory, based on providing the means to removing vehicles from the traffic stream and thus providing congestion relief along the facility, has proven itself successful time and time again in its use statewide in addition to further west on this very stretch of the I-80 corridor.

Date Prepared: 3/04/04